SITE SUMMARY

MARCH 2014

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Jackson Street Marathon
FID# 12077, Incident# 200707196

Leaking Underground Storage Tank Program

(317) 232-8900 • (800) 451-6027 www.idem.IN.gov 100 N. Senate Ave., Indianapolis, IN 46204

Background:

The Indiana Department of Environmental Management (IDEM) received a call from the City of Greencastle on July 23, 2007 regarding fuel vapors in the sanitary sewer system. The caller indicated that they opened several manholes to vent the sewer system. The IDEM responded on July 24, 2007 and was informed that lower explosive limits (LELs) in the sewer reached 100% at several locations. The Greencastle Fire Department (FD) located the potential source at a Marathon Gas Station located at 405 North Jackson Street, Greencastle, Indiana.

Leak detection indicated that the tanks were intact. Inspection of two under dispenser containment sumps showed that they were full of gasoline. The Greencastle FD immediately shut the station down due to fire and explosion hazard.

Actions Taken:

At the direction of IDEM, the owner hired an environmental consultant and began removing product from the sumps. Once the sumps were emptied, IDEM found corroded piping that leaked. The IDEM underground storage tank (UST) Inspector noted that the fuel lines had been recalled by the manufacturer, but the owner had not replaced the fuel lines. Fuel records indicated an inventory loss of premium fuel to the amount of 3,300 gallons. Leak detection equipment showed an inventory loss between July 17 and July 24, 2007.

City sewers were vented at two locations to address explosive vapor concerns. Once LELs around the station were lowered, the city brought in their sewer camera to see where product was entering the sewer. The camera recording identified two locations of obvious product infiltration at sewer joints, down gradient, and adjacent to the sumps.

The consultant excavated trenches along the entire length between the sewer and the property line on the south side of the street. The goal was to get below the sewer line, install a slurry wall and a temporary recovery system to collect any fuel in the soil. They also recovered fuel twice a day from tank monitoring pits and three monitoring wells. They all initially contained four to six inches of product.

The consultant backfilled the trench with four feet of stone installed collection sumps at each end parallel to the east-west sewer on the north side of property. They excavated an area between the sewer and the equipment sumps and installed another recovery sump. They installed a trailer-mounted recovery system to collect product and water from trench.

The consultant excavated heavily contaminated soil in the area from the station to the trench. Contamination from an old release was evident as well with dark stained soil. The sanitary sewer lateral runs along the back of the facility (south to north) and connects several businesses to the sewer main. They installed a temporary above ground sewer line to connect the other businesses. This sewer lateral had been partially excavated to check for possible migration of product.

Finally, they removed the sewer air ventilation units once vapors were mitigated. The trench and excavation areas were backfilled. Two accesses to observation/extraction wells are visible at each end of the trench. A third observation/extraction well is directly north of the UST equipment sumps. About 3,600 gallon of gasoline was released from lines under the dispensers. About 19,380 gallons of product and water were recovered and 1,250 tons of impacted soil excavated and removed from the site for disposal.

The consultant backfilled all excavated areas, a contractor repaired the piping, and station was returned to operation. The consultant submitted an Initial Site Characterization Report on September 21, 2007 and Further Site Investigation Reports on March 7, 2008 and August 11, 2008. The sewers adjacent to the site intercepted the product and soil and groundwater contamination did not migrate off site except via sewer. IDEM approved the Site Characterization on November 21, 2009.

IDEM approved a Corrective Action Plan on June 3, 2009 that consisted of biweekly enhanced fluid recovery (EFR) events. EFR events continued until free product was no longer apparent. Ground water continues to be monitored for dissolved contamination levels.

Environmental Impacts:

Soil, ground water, and utilities were impacted by the release. Approximately 3,600 gallons of free product was released from the UST system at the facility. All free product in the subsurface has been removed from the site. Impacts to city sanitary sewers including explosive levels of petroleum vapor have been addressed.

Next Steps:

Ground water monitoring continues and the site is near closure. IDEM will likely issue a No Further Action Determination contingent on recordation of an environmental restrictive covenant restricting ground water use for remaining contamination above the residential screening level in the spring of 2014.

More Information:

Environmental Issues - Sampling, Gasoline Spills, and Cleanup
Leaking Underground Storage Tank Program
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015
317/233-8900 or toll free at 800/451-6027, ext. 4-0976
LeakingUST@idem.in.gov

IDEM Virtual File Cabinet - To view public records for this site, visit IDEM's Virtual File Cabinet at www.idem.IN.gov/6551.htm, click on Document Search, enter the index as "FID", and enter the Value "12077".

IDEM UST Branch Information - For general information and links to additional resources, visit IDEM's Underground Storage Tanks Web page at www.idem.IN.gov/4999.htm and IDEM's Leaking Underground Storage Tanks Web page at www.idem.IN.gov/4997.htm.